

IN THE CLAIMS:

Please cancel Claims 1-3, 6-13 and 18-48, which are withdrawn from consideration, without prejudice.

Please amend the claims as follows:

4. (Amended) An isolated nucleic acid encoding mammalian heart alpha kinase, wherein the nucleic acid is selected from the group consisting of :

- a. the DNA sequence of SEQ ID NO: 34;
- ~~b. the DNA sequence of SEQ ID NO: 36;~~
- b e. DNA sequences that hybridize to the sequence of subparts (a) ~~or (b)~~ under standard hybridization conditions; and
- c ~~d~~. DNA sequences capable of encoding the amino acid sequence encoded by the DNA sequences of subparts (a) or ; (b) ~~or (c)~~.

14. (Amended) A recombinant DNA expression vector comprising the nucleic acid of ~~any~~ of Claims ~~1, 4, 7, 10 or 12~~, wherein the DNA encoding the heart alpha kinase is operatively associated with an expression control sequence.

16. (Amended) A unicellular host transformed with a recombinant DNA molecule comprising a DNA sequence or degenerate variant thereof, which encodes an heart alpha kinase, or a fragment thereof, selected from the group consisting of:

- ~~a. the DNA sequence of (SEQ ID NO: 26);~~
- ~~b. the DNA sequence of (SEQ ID NO: 28);~~
- ~~c. the DNA sequence of (SEQ ID NO: 30);~~
- ~~d. the DNA sequence of (SEQ ID NO: 32);~~
- a e. the DNA sequence of (SEQ ID NO: 34);
- ~~f. the DNA sequence of (SEQ ID NO: 36);~~
- ~~g. the DNA sequence of (SEQ ID NO: 38);~~
- ~~h. the DNA sequence of (SEQ ID NO: 40);~~

b i. DNA sequences that hybridize to ~~any of~~ the foregoing DNA sequences under standard hybridization conditions; and

c j. DNA sequences that encode ~~code on expression for~~ an amino acid sequence encoded by any of the foregoing DNA sequences;

wherein said DNA sequence is operatively linked to an expression control sequence.